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# **COSTS and RETURNS**



**Commercial  
Cotton  
Farms**

# 1961

This report is part of a continuing nationwide study of costs and returns on farms and ranches by type and size in some of the important farming regions of the United States, conducted under the general supervision of Wylie D. Goodsell, Farm Economics Division, Economic Research Service. Objectives, methodology, procedure, and terms are uniform for all areas covered in the study.

Publications in this series are:

- Costs and Returns, Commercial Dairy Farms, Northeast and Midwest, 1961
- Costs and Returns, Commercial Corn Belt Farms, 1961
- Costs and Returns, Commercial Egg-Producing Farms, New Jersey, 1961
- Costs and Returns, Commercial Cotton Farms, 1961
- Costs and Returns, Commercial Tobacco Farms, Coastal Plain, North Carolina, 1961
- Costs and Returns, Commercial Tobacco-Livestock Farms, Bluegrass Area, Kentucky, 1961
- Costs and Returns, Commercial Wheat Farms, Plains and Pacific Northwest, 1961
- Costs and Returns, Western Livestock Ranches, 1961

Summary statistics for all types of farms in the series are presented in the annual report, Farm Costs and Returns, Commercial Farms, by Type, Size, and Location, Agriculture Information Bulletin No. 230, Revised, 1962. In this annual report, information is given for 1961 with comparisons with 1960 and 1959, and with the period 1957-59.

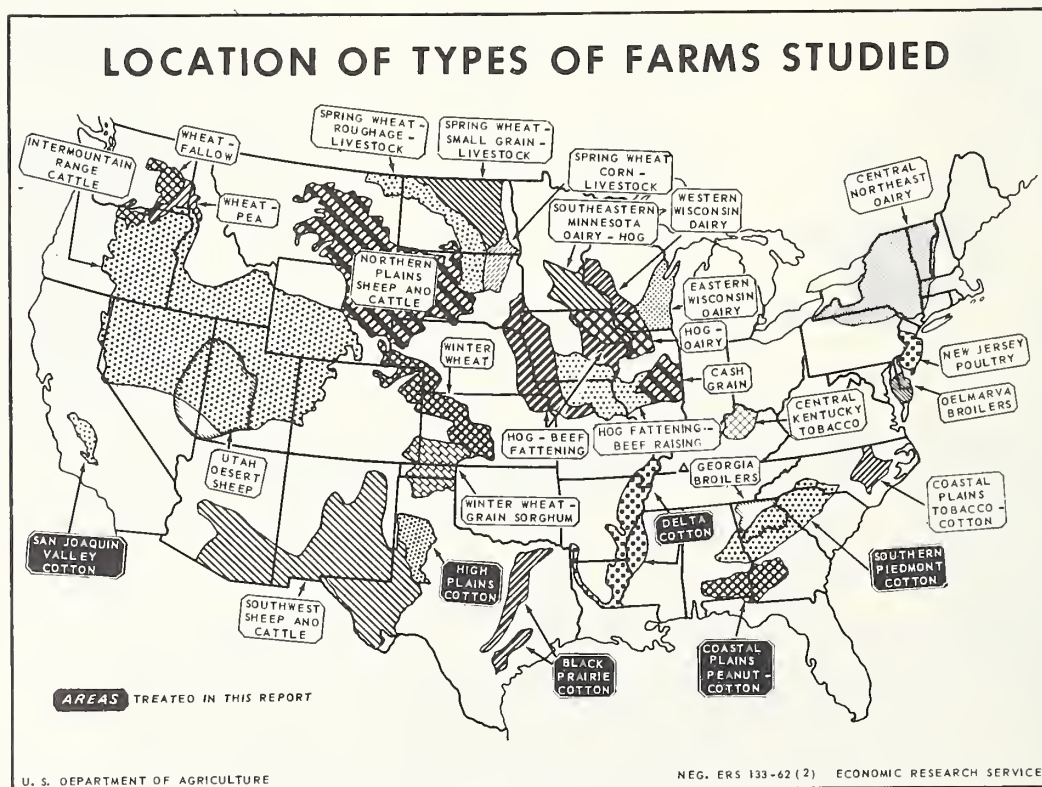


Figure 1

# COSTS AND RETURNS, COMMERCIAL COTTON FARMS, 1961

W. Herbert Brown, Agricultural Economist,

Farm Economics Division, ERS

This report presents information on costs and returns on typical cotton farms in important cotton-producing areas in the United States (fig. 1). In 1960 and 1961, net farm incomes on these farms were as follows:

	<u>1960</u>	<u>1961</u>
Cotton farms:		
Southern Piedmont. . . . .	\$1,894	\$2,671
Mississippi Delta:		
Small. . . . .	1,737	1,993
Large-scale . . . . .	24,476	30,379
Texas:		
Black Prairie . . . . .	2,878	3,502
High Plains (nonirrigated) . . . . .	9,091	13,328
High Plains (irrigated) . . . . .	14,118	22,447
San Joaquin Valley, California, irrigated:		
Cotton-general crop (medium-sized) . . . . .	26,172	25,826
Cotton-general crop (large) . . . . .	79,405	80,904
Cotton-specialty crop . . . . .	40,041	16,324
Peanut-cotton:		
Southern Coastal Plains . . . . .	3,218	3,981

Incomes vary with size, resources, technology, and location of the farms. In both years they were highest on the large farms in the San Joaquin Valley of California, and lowest on the relatively small farms in the Southeast.



In the San Joaquin Valley, net farm incomes on cotton-general crop farms were about the same in 1961 as in 1960, but on cotton-specialty crop farms they were 59 percent lower. In the other cotton-producing areas, incomes were from 15 to 59 percent higher in 1961 than the year before. For cotton farms in the High Plains of Texas and peanut-cotton farms in the Southern Coastal Plains, 1961 incomes were the highest of record.

The increases in net farm income that took place in most areas in 1961 were due to (1) higher prices received for products sold, (2) increased yields per acre, and (3) larger acreages of cotton, soybeans, and peanuts. The San Joaquin Valley farms shared in the higher prices and increased yields, but these were offset by smaller cotton acreages on all three types of farms, and were further offset on the cotton-specialty crop farms by the lower prices received for potatoes and alfalfa hay.

The support price for cotton was raised in 1961. But the change from 1960 in average price received for cotton varied from zero on peanut-cotton farms to an increase of 13 percent on cotton farms in the San Joaquin Valley. The increase was affected by the proportion of farmers choosing allotment program plan A (regular allotment and high price support) instead of plan B (40 percent larger acreage and lower price support) in 1960. All cotton was supported at the higher level in 1961. Changes in grade and staple length also affected the increase in prices received for lint.

The 1961 increases in price of cottonseed ranged from 9 percent in the San Joaquin Valley to 28

percent in the Black Prairie. Other products for which prices increased were soybeans, peanuts, corn, barley, grain sorghum, and hogs. Prices received for beef cattle were higher than a year earlier in all areas except the Southern Piedmont. In the San Joaquin Valley of California, the price of potatoes declined from \$2.53 per hundred pounds in 1960 to \$1.52 per hundred pounds in 1961 and the price of alfalfa hay declined from \$27.70 to \$21.30 per ton.

On the average, prices paid for items used in production on cotton farms changed very little from 1960 to 1961. This appeared to be a slowing down of the upward trend in prices paid.

Government programs for both cotton and feed grains were changed in 1961. In 1959 and 1960, cotton producers had the opportunity to choose between (1) the regular allotted acreage of cotton with prices supported at 75 or 80 percent of parity (plan A) and (2) a 40-percent larger acreage with prices supported at 60 or 65 percent of parity (plan B). In 1961, the acreage of cotton was limited to the regular allotment and the price was supported at 82 percent of parity. The acreage allotment for cotton in the United States was about 13 percent above the regular allotment in 1960, and 5 percent above the allotment with the plan B acreage added. On cotton farms in the San Joaquin Valley, where more than 80 percent of the operators of farms of the sizes included in this report chose plan B in 1960, the acreage of cotton harvested was less in 1961 than in 1960. This was because the increase in acreage of cotton from the choice of plan B in 1960 was greater than the 1961 increase in regular allotments. In other areas represented

in this report, less than 30 percent of the operators chose plan B in 1960. On farms in these areas, the acreage in cotton was larger in 1961 than in 1960.

In 1961, the Feed Grain Program was available to producers of corn and grain sorghum. Payments were made for voluntarily reducing the acreage of these crops (a) by 20 to 40 percent of the 1959-60 average acreage, or (b) by 20 acres. An operator with 25 acres or less of corn and grain sorghum could place the entire acreage in the program. Payments per acre for the first 20-percent reduction in acreage were 50 percent of the local support price times the 1959-60 average yield for the county adjusted by a farm productivity index. For acreage reductions of from 20 to 40 percent, the payment was 60 instead of 50 percent of the support price. Reductions above 40 percent went back to the 50-percent rate. Land removed from production of corn or grain sorghum could not be used for crops for harvest or for pasture. There was some participation in this program in all areas, but the Black Prairie and High Plains of Texas were the only areas where participation was significant. In the other areas, most of the corn and grain sorghum was fed on the farms where grown.

Yields per acre on all except peanut-cotton farms in the Southern Coastal Plains were higher in 1961 than in 1960. Yields per acre of all major crops in the High Plains were the highest on record.

Net farm production was higher in 1961 than in 1960 on all farms except cotton-general crop farms in the San Joaquin Valley and cotton farms in the Black Prairie. The increases were due mainly to con-

tinued increases in size of farm, higher yields per acre, and increased acreages of cotton and other important crops such as soybeans, potatoes, and peanuts. On cotton-general crop farms in the San Joaquin Valley, net farm production was lower in 1961 because of fewer acres of cotton; on cotton farms in the Black Prairie the lower production was due mostly to lower yields of cotton and to participation in the Feed Grain Program.

Changes in total farm expenses were closely associated with changes in net farm production, but expenses generally changed less than production. Changes in prices paid were generally small, and had relatively little influence on farm expenses.

#### Cotton Farms, Southern Piedmont

In 1961, net farm incomes on cotton farms in the Southern Piedmont were 41 percent higher than in 1960, and were the second highest on record. However, they were still not as high as on most of the other cotton farms reported (table 1).

The increase in net farm income was due to (1) increase in prices received for cotton lint, cottonseed, and hogs, (2) higher yields per acre, (3) better quality of lint, and (4) increased size of farm. In 1961 the yield of cotton was 17 percent higher than a year earlier. Yields of other crops increased by smaller percentages.

#### Small and Large-Scale Cotton Farms, Mississippi Delta

Operations on small and large-scale cotton farms in the Mississippi Delta present a contrast to those on cotton farms in other areas. Of

Table 1.- Organization, production, costs and returns,  
cotton and peanut-cotton farms, Southeast, 1960 and 1961

Item	Unit	Cotton farms, Southern Piedmont		Peanut-cotton farms, Southern Coastal Plains	
		1960	1961 <u>1/</u>	1960	1961 <u>1/</u>
Total farm capital, Jan. 1.....	Dollar	24,480	26,300	16,500	17,180
Total labor used.....	Hour	4,400	4,860	3,980	3,910
Land in farm.....	Acre	214	220	177	184
Cropland harvested.....	do.	64	68	69	71
Crops harvested:					
Cotton.....	do.	24	26	12	14
Peanuts.....	do.	--	--	20	22
Corn.....	do.	15	13	<u>2/</u> 35	<u>2/</u> 33
Oats.....	do.	11	13	--	--
Wheat.....	do.	6	7	--	--
Crop yields per harvested acre:					
Cotton.....	Pound	302	352	403	323
Peanuts.....	do.	---	---	1,264	1,237
Corn.....	Bushel	28	31	33	43
Oats.....	do.	37	44	---	---
Wheat.....	do.	25	28	---	---
Gross farm income.....	Dollar	5,265	6,447	6,949	7,793
Operating expenses.....	do.	3,371	3,776	3,731	3,812
Net farm income.....	do.	1,894	2,671	3,218	3,981
Prices received:					
Cotton.....	do.	.325	.340	.321	.321
Cottonseed.....	do.	37.05	46.77	35.80	41.20
Peanuts.....	do.	---	---	.093	.106
Corn.....	do.	1.19	1.20	1.14	1.16
Oats.....	do.	.80	.76	---	---
Wheat.....	do.	1.82	1.78	---	---
Index numbers (1957-59=100):					
Crop yields per acre.....	---	95	109	117	117
Net farm production.....	---	99	118	130	137
Prices received for products sold.....	---	97	100	95	101
Prices paid, including wages to hired labor..	---	<u>3/</u> 100	<u>3/</u> 103	99	99

1/ Preliminary. 2/ Includes corn hogged off. 3/ Includes cropper labor.

Note: Information presented here is on an owner-operator basis primarily for comparability between types of farms. Net farm income is the return to operator and unpaid members of the family for their labor and management on the farm and return to total capital. No allowance has been made for payment of rent, interest, or mortgage.



the farms included in this report, operators of large-scale cotton farms in the Delta had the next largest net farm income in 1961 and small cotton farms in the Delta had the smallest. The difference in income between these two types of farms was due mainly to size. Net farm income per acre of cropland harvested was about 5 percent higher on the small than on the large-scale farms. Investment in machinery and equipment per 100 acres of cropland harvested is about 70 percent higher on the small farms.

Net farm incomes on small and large-scale cotton farms were 15 and 24 percent higher, respectively, in 1961 than in 1960 (table 2). The increase was due to (1) higher prices received for cotton lint, cottonseed, soybeans, cattle, and hogs; (2) higher yields of cotton and corn, and (3) increased acreages of cotton and soybeans. The latter two crops were the main sources of income on these farms.

Some of the increase in yields per acre from 1960 to 1961 may have been due to more favorable weather in 1961; but there has been an upward trend in yields in this area. The yield per acre of corn was 6 bushels above the previous record high.

Net farm production increased more than crop yields per acre. This resulted from larger acreages of cotton and soybeans and increased production of beef.

#### Cotton Farms, Black Prairie, Texas

In 1961, net farm incomes on cotton farms in the Black Prairie of Texas were 22 percent above

1960 (table 3). The only years in which returns were higher were 1953 and 1958. The increase in net farm income was due to (1) higher prices received for cotton lint, cottonseed, corn, and cattle, (2) record yields of crops other than cotton, and (3) a small increase in the acreage of cotton. The yield of cotton was 8 percent below 1960 and 17 percent below 1957-59. In 1961, rainfall was sufficient for good growth of cotton but root rot caused severe damage.

About 16 and 28 percent of the acreages of corn and grain sorghum, respectively, were put in the Feed Grain Program in 1961. But due to increases in acreage and yields of oats, the 1961 reduction in feed grain produced and in net farm production was less than would be expected with the smaller acreages of corn and grain sorghum. Some of the increase in yields may have been due to more favorable weather in 1961 than in 1960, and some may have been caused by greater use of commercial fertilizer.

Mechanization continued in 1961. The proportion of cotton harvested with machine strippers was higher than in the previous years. Also, there has been a shift from two-row to four-row equipment.

#### Nonirrigated and Irrigated Cotton Farms, High Plains, Texas

In 1961, net farm incomes on nonirrigated and irrigated cotton farms in the High Plains averaged \$13,328 and \$22,447, respectively. These were record incomes for both types of farms.

Several factors combined to give these high incomes: (1) Prices received for cotton lint, cottonseed,

Table 2.- Organization, production, costs and returns,  
cotton farms, Mississippi Delta, 1960 and 1961

Item	Unit	Small		Large-scale	
		1960	1961 <u>1/</u>	1960	1961 <u>1/</u>
Total farm capital, Jan. 1.....	Dollar	13,550	13,840	205,850	214,440
Total labor used.....	Hour	3,180	3,440	31,930	33,920
Land in farm.....	Acre	58	59	1,000	1,000
Cropland harvested..	do.	36	38	610	623
Crops harvested:					
Cotton.....	do.	16	18	252	267
Soybeans.....	do.	13	14	264	275
Corn.....	do.	5	4	29	19
Oats.....	do.	1	1	40	41
Crop yields per harvested acre:					
Cotton.....	Pound	472	476	522	551
Soybeans.....	Bushe1	22	22	24	24
Corn.....	do.	27	35	37	50
Oats.....	do.	51	46	54	47
Gross farm income.....	Dollar	4,146	4,685	66,829	75,696
Operating expenses.....	do.	2,409	2,692	42,353	45,317
Net farm income.....	do.	1,737	1,993	24,476	30,379
Prices received:					
Cotton.....	do.	.325	.331	.324	.327
Cottonseed.....	do.	41.45	50.39	40.89	50.99
Soybeans.....	do.	2.04	2.21	2.05	2.23
Corn.....	do.	---	---	1.15	1.18
Oats.....	do.	---	---	.70	.66
Index numbers (1957-59=100):					
Crop yields per acre.....	---	105	110	103	111
Net farm production.....	---	108	117	109	119
Prices received for products sold.....	---	98	103	100	104
Prices paid, including wages to hired labor..	---	103	102	<u>2/</u> 102	<u>2/</u> 103

1/ Preliminary. 2/ Includes cropper labor.

Note: Information presented here is on an owner-operator basis primarily for comparability between types of farms. Net farm income is the return to operator and unpaid members of the family for their labor and management on the farm and return to total capital. No allowance has been made for payment of rent, interest, or mortgage.

Table 3.- Organization, production, costs and returns, cotton farms, Texas, 1960 and 1961

Item	Unit	High Plains				Black Prairie	
		Nonirrigated		Irrigated			
		1960	1961 <sup>1/</sup>	1960	1961 <sup>1/</sup>	1960	1961 <sup>1/</sup>
Total farm capital, Jan. 1.....	Dollar	59,140	60,750	113,950	117,310	47,020	49,630
Total labor used.....	Hour	3,230	3,170	7,130	7,900	3,190	3,060
Land in farm.....	Acre	426	436	369	378	249	261
Cropland harvested.....	do.	322	289	284	274	155	152
Crops harvested:							
Cotton: Nonirrigated.....	do.	118	137	26	26	76	78
Irrigated.....	do.	---	---	128	150	---	---
Grain sorghum: Nonirrigated.....	do.	197	145	74	53	29	20
Irrigated.....	do.	---	---	54	43	---	---
Corn.....	do.	---	---	---	---	24	20
Oats.....	do.	---	---	---	---	15	20
Crop yields per harvested acre:							
Cotton: Nonirrigated.....	Pound	279	308	298	330	181	167
Irrigated.....	do.	---	---	521	577	---	---
Grain sorghum: Nonirrigated.....	Cwt.	15	18	17	20	18	20
Irrigated.....	do.	---	---	31	38	---	---
Corn.....	Bushel	---	---	---	---	25	31
Oats.....	do.	---	---	---	---	29	31
Gross farm income.....	Dollar	16,023	20,646	29,512	39,414	7,764	8,385
Operating expenses.....	do.	6,932	7,318	15,394	16,967	4,886	4,883
Net farm income.....	do.	9,091	13,328	14,118	22,447	2,878	3,502
Prices received:							
Cotton.....	do.	.297	.315	.294	.315	.278	.315
Cottonseed.....	do.	40.92	50.43	40.92	50.43	41.28	52.94
Grain sorghum.....	do.	.78	.86	.78	.86	---	---
Corn.....	do.	---	---	---	---	1.14	1.17
Cattle.....	do.	19.80	20.60	19.80	20.60	19.80	20.59
Index numbers (1957-59=100):							
Crop yields per acre.....	---	117	132	107	121	94	95
Net farm production.....	---	128	143	108	130	116	111
Prices received for products sold.....	---	95	106	96	107	97	107
Prices paid, including wages to hired labor.....	---	106	108	104	104	103	102

<sup>1/</sup> Preliminary.

Note: Information presented here is on an owner-operator basis primarily for comparability between types of farms. Net farm income is the return to operator and unpaid members of the family for their labor and management on the farm and return to total capital. No allowance has been made for payment of rent, interest, or mortgage.

grain sorghum, and beef cattle were the highest since 1954, and the ratio of prices received to prices paid was the highest since 1956. (2) Yields per acre of both cotton and grain sorghum were at record levels in 1961. The weather was favorable for crop production for the fifth consecutive year. On the nonirrigated farms, the yield of cotton in 1961 was 73 percent above the previous 10-year average (1951-60). (3) The acreage of cotton was about 15 percent higher than in 1960 and the highest since 1952. This was due to increase in size of farms, larger allotments, and less crop failure.

On nonirrigated cotton farms, about 26 percent of the acreage of grain sorghum was put in the Feed Grain Program in 1961. However, because of a good crop year and higher yields per acre, production of grain sorghum was reduced by only 7 percent. The corresponding figures for irrigated cotton farms were 19 and 10 percent, respectively.

Despite increases in both total land farmed and net farm production, less labor per farm was used in 1961 than in 1960. This was the result of the reduction in acreage of grain sorghum and the continued shift from hand snapping to machine stripping of cotton.

#### Medium-Sized and Large Cotton-General Crop Farms, San Joaquin Valley, California

Net farm incomes on medium-sized and large cotton-general crop farms changed little from 1960 to 1961 (table 4). They were from 10 to 12 percent below the 1957-59 average. Crop yields per acre and prices received averaged higher in 1961 than a year earlier, but these

factors were offset by a reduction in the acreage of cotton.

The decline in the acreage of cotton grown resulted from the change in the cotton program. Because in 1960 more than 80 percent of the operators on these two sizes of farms chose Plan B with the larger acreage of cotton, the regular allotment plus the additional acreage for Plan B was larger in that year than the allotment in 1961.

From 1960 to 1961 the price of cotton lint in this area increased 13 percent. This was more of a spread than in the other cotton producing areas. It resulted from the 1961 increase in price support for all cotton, the high proportion of Plan B cotton in 1960, and an improvement in quality of cotton in 1961. The price of cottonseed increased less here than in other areas.

The yield of cotton was higher than a year earlier but it was lower than the record years of 1957 to 1959. The yield of barley also was higher than a year earlier.

Net farm production was from 4 to 6 percent lower in 1961 than in 1960. The reduction in acreage of cotton more than offset the effect of higher yields per acre and larger acreages of barley and alfalfa.

#### Cotton-Specialty Crop Farms, San Joaquin Valley, California

In 1961, net farm incomes on cotton-specialty crop farms averaged \$16,324 per farm--the lowest since 1953. They were 59 percent below 1960 and 55 percent below 1957-59. The lower incomes were due mostly to a drop in the price of potatoes from an average of \$2.53 per hundred pounds in 1960



Table 4.- Organization, production, costs and returns, cotton farms,  
San Joaquin Valley, California (irrigated), 1960 and 1961

Item	Unit	Cotton-general crop				Cotton-specialty crop	
		Medium-sized		Large		1960	1961 1/
		1960	1961 1/	1960	1961 1/		
Total farm capital, Jan. 1.....	Dollar	274,160	275,530	938,820	944,860	276,800	278,360
Total labor used.....	Hour	10,380	10,010	32,260	30,350	13,170	13,220
Land in farm.....	Acre	338	342	1,235	1,252	338	342
Cropland harvested.....	do.	319	322	1,108	1,124	319	322
Crops harvested:							
Cotton.....	do.	152	135	507	437	143	125
Potatoes.....	do.	---	---	---	---	68	80
Alfalfa.....	do.	111	123	287	319	65	66
Barley.....	do.	35	39	247	281	43	51
Crop yields per harvested acre:							
Cotton.....	Pound	958	986	958	986	958	986
Potatoes.....	Bushel	---	---	---	---	332	333
Alfalfa.....	Ton	5	5	5	5	5	5
Barley.....	Bushel	53.4	54.5	53.4	54.5	53.4	54.5
Gross farm income.....	Dollar	72,332	71,642	230,704	226,245	118,656	100,710
Operating expenses.....	do.	46,160	45,816	151,299	145,341	78,615	84,386
Net farm income.....	do.	26,172	25,826	79,405	80,904	40,041	16,324
Prices received:							
Cotton.....	do.	.318	.355	.317	.355	.318	.355
Cottonseed.....	do.	51.50	55.90	51.50	55.90	51.50	55.90
Potatoes.....	do.	---	---	---	---	2.53	1.52
Alfalfa.....	do.	27.70	21.30	27.70	21.30	27.70	21.30
Barley.....	do.	1.01	1.09	1.01	1.09	1.01	1.09
Index numbers (1957-59=100):							
Crop yields per acre.....	---	93	96	94	96	103	104
Net farm production.....	---	103	99	107	101	104	108
Prices received for products sold.....	---	103	105	101	105	112	91
Prices paid, including wages to hired labor.....	---	106	107	105	105	107	108

1/ Preliminary.

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to \$1.52 per hundred pounds in 1961 which lowered receipts from potatoes by nearly \$27,000 per farm. Other factors contributing to the reduction in income included lower prices received for alfalfa hay and a reduction in the acreage of cotton. However, yields per acre and prices received for cotton lint, cottonseed, and barley were higher than a year earlier.

In contrast to cotton-general crop farms in the area, net farm production on the cotton-specialty crop farms was 4 percent higher in 1961 than in 1960. Increased acreages of potatoes, barley, and alfalfa, and higher yields per acre more than offset the effect of fewer acres of cotton.

#### Southern Coastal Plains, Peanut-Cotton Farms

Net farm incomes on peanut-cotton farms were the highest on record in 1961. They were 15 percent above the previous record in

1958. The increase resulted from higher prices received for cottonseed, peanuts, cattle, hogs, and corn, and increased acreages of cotton and peanuts. The increase in acreage of cotton and peanuts more than offset the decrease in the acreage of corn.

Yield per acre of corn was at an all time high in 1961, and the yield of peanuts was only 2 percent below the record set in 1960. But the cotton yield was below both 1960 and the 1956-60 average. Also, the quality of lint was not as good as in 1960.

Prices received for cotton lint by peanut-cotton farmers did not increase from 1960 to 1961 here as they did in other areas. Prices in 1960 were comparatively high because of the low proportion of operators choosing plan B, and prices in 1961 were affected by a reduction in quality of lint. Prices received for peanuts in 1961 increased more than the increase in support price.



Growth Through Agricultural Progress